REMARKS

Claims 1-13 are pending. By this Amendment, claims 1, 10, and 12 are amended. Claims 1-13 are presented for reconsideration and allowance.

Telephone Interview Summary

Applicant and their attorneys thank the Examiner for the courtesy extended during the telephonic interview on February 21, 2007. The substance of the interview is substantially reflected in this Remarks section of the instant Amendment.

Nonobviousness of Claims 1-13

Claim 1 has been rejected under 35 U.S.C. § 103(a) as being obvious in view of U.S. Pat. No. 6,088,347 to Minn et al, in combination with U.S. Pat. No. 5,950,124 to Trompower et al. The Minn et al. patent describes spread spectrum modulation in which first and second input signals are each modulated by different direct-sequence spreading codes that have low cross-correlation with one another. The Minn et al. patent describes the well-known technique of modulating an information signal with a user-specific, or channelization, code (e.g. Walsh code) and a cell-specific code (e.g. PN code). For a particular information signal, the rates of the user-specific code and the cell-specific code can be different (col. 12, lines 40-43).

The Trompower et al. patent discloses dynamically modifying the transmitting or receiving PN code parameters.

Applicant respectfully submits that neither the Minn et al. patent, nor the Trompower et al patent, alone or in combination, teach or suggest the two-level spreading as claimed in independent claims 1, 10, and 12.

A non-limiting example of the two-level spreading according to one embodiment of the invention is described in the specification in paragraph 12, and with reference to Fig. 1. Each

data bit $b^{k,c}$, is spread by L_2 chips of first spreading code w^k and each of these chips is further spread by L_1 chips of second spreading code p^c. As a result, the total spreading factor is equal to the product L_2L_1. Also, as depicted in Fig. 1, in one embodiment, the spreading factor of each level of the two-level spreading can be the lengths L_1 and L_2, respectively, of the spreading codes, such that each information bit $b^{k,c}$ is actually represented by $L_1 \cdot L_2$ symbols. Furthermore, the output chip rate is $r_{c2} = L_2 \cdot L_1 \cdot r_b$, where r_b is the bit rate of the information signal.

The Minn et al. patent does not describe applying a first spreading code and a second spreading code to produce a total spreading factor that is a product of the two individual spreading factors, as claimed in claim 1, or to produce a second level-spread signal having a length of x · y · z symbols, as claimed in claim 10, or applying first level and second level spreading where each of the spreading factors is equal to the respective length of the corresponding spreading code, as claimed in amended claim 12.

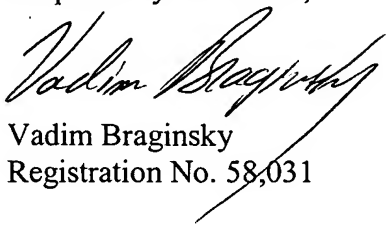
None of the other cited references, either alone, or in any combination, teach or suggest two-level spreading as claimed. Therefore, Applicant respectfully submits that a *prima facie* case for obviousness has not been made, and cannot be made against independent claims 1, 10, and 12.

Dependent claims 2-8 and 9, further define claim 1; dependent claim 11 further defines independent claim 10; and dependent claim 13 further defines independent claim 12. Therefore, these claims are also believed to be allowable.

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of claims 1-13 are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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